

VIRGINIA

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TWO DOLLARS





Director's Column

William L. Woodfin, Jr.

National Hunting & Fishing Day (NHF) will take place on Saturday, September 28. For 31 years now, people of all ages have been recognizing the importance of these outdoor activities.

According to the National Shooting Sports Foundation, each day 71 million hunters and anglers are working to conserve and to improve our natural resources. Generations of hunters and anglers have contributed more than \$2.2 billion to wildlife conservation programs through license sales, through special taxes on sporting equipment, and through donations of land and money. In addition, they have volunteered thousands of hours to these same programs. For more than 100 years, sportsmen and sportswomen have proven themselves to be dedicated supporters of conservation and scientific wildlife management.

Yet, NHF Day is only one day in a year of outdoor experiences that celebrate our wildlife and natural resources. Each time sportsmen and sportswomen go afield, they renew the special connection to the outdoors. If you appreciate our natural resources, I invite you to introduce a child, parent, friend, or neighbor to experience these rich traditions that have long been an important part of our nation's history. It is a major part of our mission at the Department of Game and Inland Fisheries to assure

that Virginians will have opportunities to enjoy wildlife, inland fish, boating, and related outdoor experiences and to promote safety for everyone participating in these activities.

As we prepare for another hunting season, we all need to keep in mind that safety afield and on the water is essential. Our educational outreach programs in hunter safety, boating safety, and outdoor skills all emphasize the importance of preventing potential problems and the best way to respond to them when they do occur. In this issue of *Virginia Wildlife* magazine, two of our volunteer hunter education instructors have contributed their expertise on the topic of tree stand safety. As outdoor recreational equipment becomes more advanced, the Department reminds hunters, anglers, and boaters to be aware that modern technology doesn't replace safe practices and common sense.

As you head out for NHF Day and throughout the season, we hope that all of your outdoor adventures will be both safe and enjoyable. To find out more about National Hunting and Fishing Day, and if you're hunting for information about outdoor opportunities offered by the Department, please visit our Web site at [www.dgf.state.va.us](http://www.dgif.state.va.us).



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Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; to provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation; to promote safety for persons and property in connection with boating, hunting and fishing.



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About the cover: Leaping from its wet hiding spot this American toad (*Bufo americanus*) blends in well with its surroundings of stones and pebbles. ©Joe McDonald

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"Just because some safety harnesses appear to be suitable for hunting and are inexpensive doesn't mean they will function when that critical moment occurs; they could easily fail."

Choose wisely.

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The Music

story and photos by King Montgomery

The best sports literature is found in fishing. For centuries, anglers have recorded their experiences, observations, thoughts, and feelings; not only about how and where to catch fish, but about the many wonders of nature, including human nature, that attend the places where we angle.



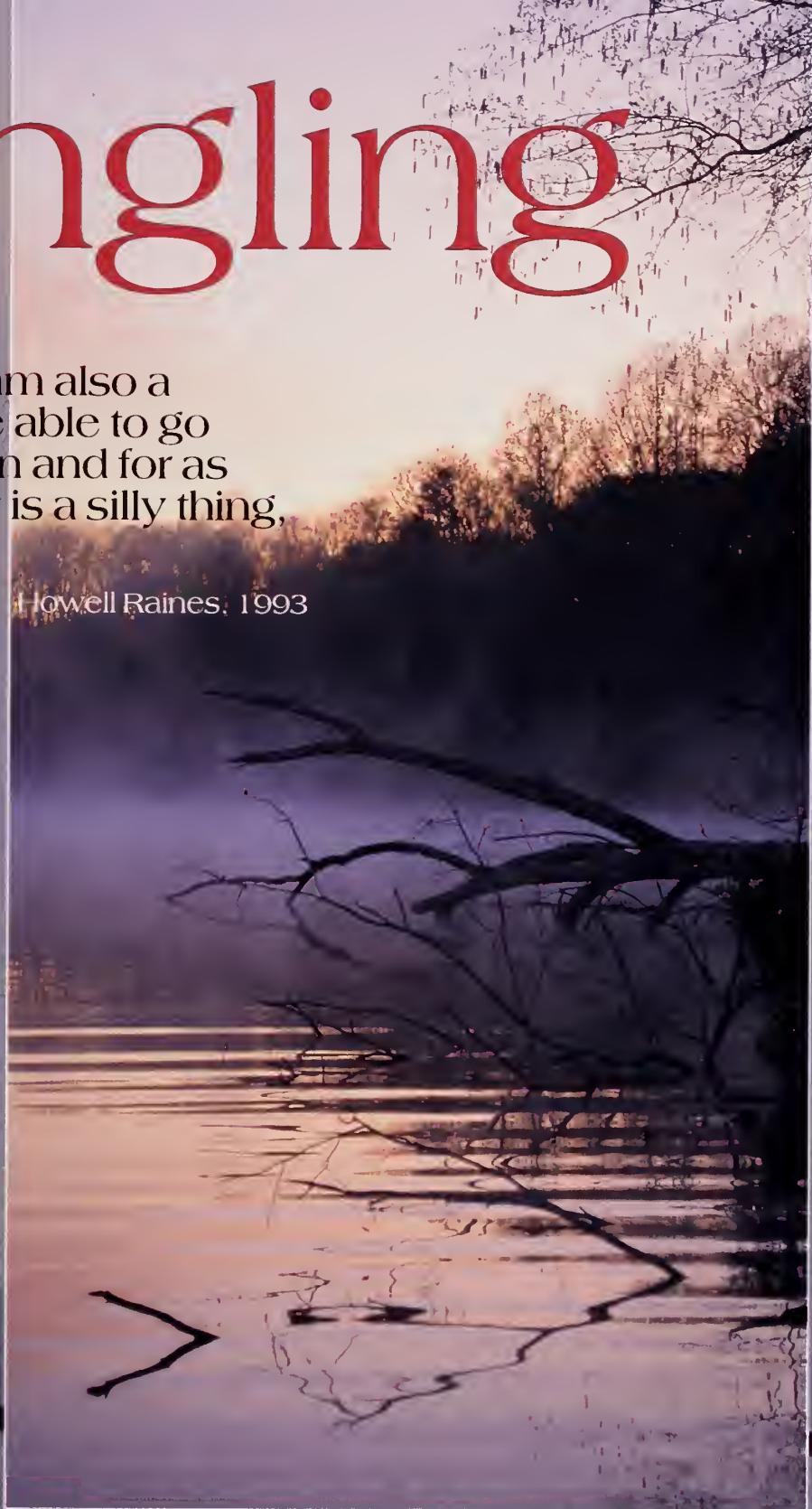
“Fishermen are born honest,
but they get over it.”

Ed Zern, 1945

of Angling

"I have learned that I am also a person who has to be able to go fishing whenever I can and for as long as I want to go. It is a silly thing, but there it is."

Howell Raines, 1993



"Perhaps fishing is, for me, only an excuse to be near rivers. If so, I'm glad I thought of it."

Roderick L. Haig-Brown, 1946



“Perhaps all you can say is that there are great lapses or discrepancies in time; that and the simple if inexplicable fact that some people have fishing in their hearts.”

Russell Chatham, 1998



“The music of angling is more contrived in the greatest sym-

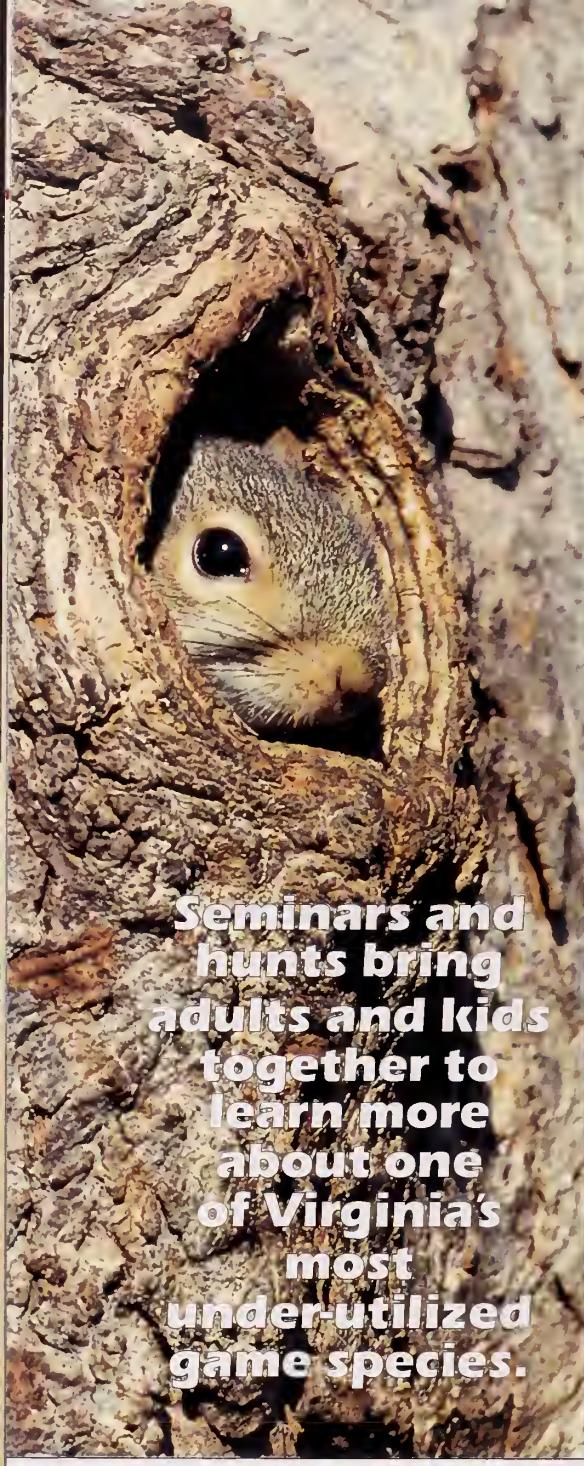


compelling to me than anything phony hall. ”

A. J. McClane, 1967

“Fishing consists of a series of misadventures interspersed by occasional moments of glory.”

Howard Marshall, 1967



Seminars and hunts bring adults and kids together to learn more about one of Virginia's most under-utilized game species.

©Paul Purcell

by Ken Perrotte

Okay, now tell me, what do squirrels eat?" asked wildlife biologist Ron Hughes to the roomful of adults and youngsters.

Hands shot up, waving with a "pick me" urgency designed to attract Hughes' attention.

"Yes," Hughes acknowledged, pointing to one boy.



Going Nuts for S

"They eat acorns, corn, pine cones, bird seed, and a lot of other things," came the eager answer.

"Right. Squirrels gather and store their food, and they locate it later by smell. Squirrels can sniff out an acorn buried under a foot of snow," Hughes explained to the "oohs" and "wows" from the group.

Hughes also told how squirrels gnaw on shed antlers and turtle shells for calcium; they do eat meat—insects, grubs, even young birds.

First, the classroom session was an orientation to the squirrel's environment. Next, a trip to the shooting range taught them to safely operate their firearms, and finally, they had an afternoon of hunting squirrels at the C.F. Phelps Wildlife Management Area in Fauquier County.

This early November 2001 "Youth Squirrel Hunt" was a first for the Virginia Department of Game and Inland Fisheries (VDGIF). The brainchild of VDGIF game warden John Berry (Prince William County)



quirrels

Above: VDGIF's Greg Surrena of Prince William County, inspects the shotgun of 12-year-old Joseph Sokoly while his father Maj. Jeff Sokoly, a U.S. Marine, looks on. The father and son hunting team live in Garrisonville.

and regional wildlife biologist Jerry Sims (Northern Piedmont), the program concept was hatched during a late season squirrel hunt early in 2001.

Children were required to have completed a Basic Hunter Education Course and be accompanied by a parent or adult guardian. The tar-

get audience for the program was children, women, and urban populations, according to Sims.

Sims calls squirrels one of the most under-utilized game resources in Virginia. "Squirrels are abundant, can be a challenge to hunt, and are a great way to introduce a youngster to hunting and the safe use of firearms in the field," Sims said.

"Most of us learned how to hunt in our youth by hunting squirrels. Today, with the abundance of deer and turkey, kids don't first learn how to hunt with small game. They are thrust right into big game hunting, and we neglect the abundant squirrel population," Sims said.

Plus, as some of the adult hunters at the Phelps hunt pointed out, the season in the northern portion of the state begins later than in the southern regions. When the seasons overlap between deer hunting and squir-

rel hunting. "We plan on doing this through workshops, educational programs, and through regulatory changes that can reduce barriers to hunting squirrels," he added. "We'd also hope public landowners and managers could, and would, be encouraged to allow the use of .22 rifles for squirrel hunting."

This first event drew a capacity crowd. Pre-registration was required, and the available spaces filled fast. The pre-hunt skill session was included because, as Hughes maintained, "It's important to understand as much as possible about the game you're hunting."

Hughes led the seminar on squirrel biology, behavior, and habitat. Berry then gave the group a primer on how to successfully locate and take squirrels in the woods.

"Did you know that only 1.5 percent of the available squirrels are



rel hunting, the tendency is to opt for the deer hunting. The earlier southern season gives the parent and child an opportunity to spend time together in the woods with a .22 hunting bushytails instead of worrying about being in a tree stand with archery gear seeking whitetails.

Sims views the program at Phelps as a model for recruiting and building interest in new hunters, and "reenergizing older hunters" for squir-

Game warden and squirrel hunting expert, John Berry leads a discussion before a group of enthusiastic youngsters and their adult companions take to the woods.





©Ken Perrotte

taken by hunters?" Berry asked. "They have more than 50 percent natural mortality and are favorites of many predators.

Berry explained that squirrels have been a source of food since humans have been in North America. He said the .22 caliber rifle cartridge was specifically designed for squirrels and other small game.

"Every rural home had a squirrel gun," he said. "A lot of country families depended on squirrels and rabbits for meat, and they hunted them with their inexpensive .22's."

On a short, pre-hunt field trip to the woods, it was tough to tell who was more enthusiastic: the youngsters or biologists Dan Lovelace and Brad Howard, as they shared their squirrel hunting tactics.

The event was held on a Saturday during fall turkey season and on the last day of early archery season; but, in this outdoor classroom, the biologists were the squirrel masters and they readily shared their expertise.

Lovelace dug into the crevices of a hollow oak tree and withdrew a number of acorn hulls, explaining how squirrels will often eat the nuts in the tree and drop the shells down through the inside of the tree.

"Many of the same principles we use for deer and turkey hunting apply to squirrel hunting," Lovelace noted. "A squirrel only has a home range of an acre to an acre and a half. We need to move slowly, quietly, and be alert for movement."

Lovelace described squirrel vocalizations, especially how they sound off to warn other squirrels when they become aware of an intruder in their area. "When that happens, just back off, sit down, and let things settle down," he said.

"The secret is to be patient. Wait for one to start moving again. Then, other squirrels will feel comfortable and also begin moving," Howard added.

Karen Holson, an outdoor education coordinator for VDGIF, believes the program reinforced many fundamental tenets.



©Ken Perrotte

"This is the practical and educational blended together. We're teaching about the game, we're teaching marksmanship, and then coordinating a hunt. This event pulls it all together. And, this is a safe environment for them to learn. They'll hear similar messages, such as 'be safe, be seen' from a variety of people," she said.

At day's end, several adult-youth hunting teams had squirrels. John Berry, the master squirrel hunter, is also a squirrel-skinning champ who can perfectly complete the job in about 60 seconds.

"The hassle of cleaning squirrels is one of the perceived drawbacks to squirrel hunting," Berry said.

"I show them it doesn't have to be a hassle at all."

During the afternoon of wading through the sunny, autumn woods, oak, beech, hickory, and poplar leaves occasionally rained down as the breeze picked up. Participants hailed this first youth squirrel event as a huge success.

Twelve-year-old Joseph Sokoly of Garrisonville, hunting with his dad Jeff, summed it up. "Any opportunity to get out in the woods is great. To get out to hunt is even better," he said with a beaming grin. □

Ken Perotte is a writer and outdoor columnist for the Fredericksburg Free Lance-Star and lives in King George County.

The firing line is ready as VDGIF shooting instructors closely watch to ensure the youngsters know how to safely handle their firearms. All of the young hunters are graduates of a Basic Hunter Education Course.

©Bill Lea

©Ken Perotte



If you would like more information about VDGIF's Outdoor Education Programs call (804) 367-6351 or visit the Department's Web site at www.dgif.state.va.us.



Safety Harnesses

by Richard Holdcraft

If you're moving up in the world of hunting this is one item you don't want to leave home without.

©Dwight Dyke



Help I've fallen and I can't get up..."

Falls from elevations occur in all industries, in all occupations, and in a myriad of work settings--from the ironworker connecting steel columns 20 feet in the air, to the laborer washing windows from a sus-

pended scaffold 60 feet from the ground, to the stock clerk retrieving goods from a shelf using a 4-foot stepladder. Falls such as these were the fourth leading cause of occupational fatalities from 1980 to 1994, resulting in 8,102 deaths. While the line, "Help, I've fallen and I can't get up" has become a sort of joke, this

literally occurs too frequently in the workplace. In the year 2000, more than 700 U.S. workers fell and never got up again: they died after falling from ladders, scaffolds, building tops, and other elevated work areas.

What does this have to do with hunters? The answer is rather simple. Although there are no conclusive national statistics currently available, every year in the United States far too many hunters experience fatal falls from elevated positions: we call them tree stands! Falls

from tree stands is the largest single cause of accidents compared to all other types of injuries. According to Ms. Julia Dixon Smith, spokeswoman for the Virginia Department of Game and Inland Fisheries (VDGIF), "Between July 1 and December 26 of last year, 17 of the 70 hunting accidents reported to VDGIF involved falls from tree stands, two of which were fatal." However, many serious hunting accidents involve falls from tree stands.

dating their use. Under OSHA regulations, the goal of Standard 1926 is to protect workers from falling 6 feet or more from a working elevation and requires them to wear an approved safety harness.

Safety Harnesses For Hunting

Deer & Deer Hunting magazine published a series of excellent articles in 1993 and again in 1999 on tree

History of Tree Stands and Safety Harnesses

The use of tree stands for hunting increases each year. However, it is not a new innovation. If we look back in our history books, we find that prehistoric man hunted his quarry from elevated positions. He would attack from cliffs, trees, or any other high ground positions, hurling spears, rocks, or clubs at his game. The British used elevated shooting positions for hunting tigers in India. They would strap platforms on elephants, climb aboard and walk through the high grasses in search of the evasive tiger. Shooting from the platform also gave the hunter some protection from the tiger in case it was wounded and retaliated by attacking the hunter. Even in modern warfare the use of elevated shooting positions has been used extensively. Using their knowledge of elevated shooting positions, today's hunters take advantage of the lessons learned and adapt them to their hunting tactics by hunting from tree stands. It is not clear how or when safety harnesses were developed and used, but it is likely that they were used in the military by airborne parachutists. Troopers from the 101st and 82nd Airborne Divisions used them beginning in World War II. Construction workers adopted the use of safety belts and harnesses when the Occupational Health and Safety Administration (OSHA) promulgated regulations in the early 1970's man-



The popularity of hunting from tree stands has been growing over the years and so have the hunting accidents caused by their use. One of the most important things to remember is that no matter how high you hang the tree stand while hunting, the decision to not use a proper safety harness could be your last.



©Bill Lea

stand safety. They also conducted a survey designed to discover how falls occur and the severity of the resulting injuries. The information gathered in that survey is astonishing. Here are some highlights of the 1993 survey: 37.2 percent (one-third of the responses) indicated they had fallen from a stand at least once. Of

those that fell, 83.2 percent said they were not wearing their safety belt; 35 percent said the reason they fell out of the tree stand was due to the branch breaking, and / or arm slipped, belt broke, or they blacked out. Note that 3 percent of the falls from tree stands resulted in permanent crippling injuries. Out of 2,300 responses, 69 people experienced a life altering change. In the 1999 study, they found a significant increase in the use of safety harnesses, from 66 percent to 78 percent; the percent of hunters who used safety restraint devices while climbing rose from 20 percent to 34. But, the percentage of hunters who were wearing a safety restraint device when they fell dropped from 17 percent to 12 percent in 1999.

These survey statistics do not take into account the number of hunters that suffer serious, permanently disabling, or fatal injuries from falls. Although these statistics may scare many individuals and cause them to avoid using tree stands altogether, when used sensibly and with the proper safety har-



©Dwight Dyke

Using a rope, strap, or belt around the waist, when hunting from a tree stand, can be extremely dangerous in a fall and, therefore, they are not recommended.

ness, they are safe. The key point in the survey is to emphasize the critical need for hunters to wear safety harnesses while hunting from tree stands.

No OSHA Standards for Hunting

Because OSHA only applies to occupational environments and not to hunting, there are no standards for safety harnesses to use during hunting. However, in the interest of safety many hunters use a rope, nylon strap, or belt around the waist as a simple solution. These hunters rely on them because they are cheap and can be carried in the coat pocket. Ropes, straps, or belts are easy to put on and adjust; however, they can be extremely dangerous. If the hunter uses a rope to tie-off to the tree using a sliding hitch knot (prusik), the knot can reduce the rope strength by as much as 50 percent or more. OSHA standards require harnesses to have sufficient strength to withstand twice the potential impact en-



This series of photographs show the use of a full-body, parachute-style, safety harness. This device is designed to fit over the shoulders, across the chest, around the waist, and under the legs, helping to cushion a hunter even in the most severe falls. Photos ©Jennifer Worrell.

ergy of a person free falling a distance of 6 feet or more. If the hunter falls, the rope, strap, or belt could break or cause him or her to hang upside down. If this occurs, the hunter could lose total consciousness in two to three minutes. During the fall it is quite possible that his or her head could slam against the tree, knocking him/her out and, therefore, be unable to call for help. Ropes, straps, or belts placed around the waist have also been responsible for breaking a person's back resulting in permanent, total disability. Worse yet, the belt could slip up around the chest or throat and restrict breathing, even causing death. If you receive a nylon strap or safety belt of this type with your tree stand, throw it away. Never use a length of rope, nylon strap, or a belt as a safety device. On the other hand, some tree stand manufacturers are beginning to realize the value of the parachute-style safety harnesses (full-body) and are now including them with new tree stands.

Consider this for a moment. A 200-pound person dropping 12



©Dwight Dyke

A chest harness is easy to put on. In a fall it helps to distribute some of the person's weight across the chest and arms, so they will hang in an upright position. For better protection and distribution of weight over the thighs, pelvis, waist, chest, and shoulders a full body safety harness is recommended.

inches with a 4-inch cushion exerts 490 pounds on the harness. That same person dropping 24 inches puts 692 pounds on the harness. A 200-pound person dropping 12 feet will exert more than 8,000 pounds on the harness and will hit the ground at approximately 21 miles



When it comes to your safety it is important to purchase the best equipment available. It could mean the difference between experiencing life, death, or a permanent disabling injury! Photos ©Jennifer Worrell.

per hour. Is it any wonder then why falls from tree stands result in severe injuries?

As of January 1998, body-belts are prohibited by OSHA because of the severity of internal injuries to individuals and technical asphyxiation through prolonged suspension using belts or ropes around the waist. So, with this in mind it makes good sense to buy only the best safety harness for hunting from a tree stand. Now the question is: what type of a safety harness is best for me?

Chest Harness

A chest harness is one type of safety device that is much safer than the simple belt or rope. A chest harness is easy to put on and adjust. In a fall it distributes the person's weight so they fall in an upright position. With this type of belt it is less likely the device will ride up on the diaphragm or throat and cut off air

supply. Some models of the chest harness can even be used to drag the deer out of the woods. Commercially manufactured chest harnesses can cost as much as \$30 for a better quality device.

However, the old saying of "pay me now, or pay me later, but eventually you will pay," comes to mind. The few dollars spent on a quality harness may save you many dollars in hospital expenses or a long-term disability. It would be prudent to spend wisely on your safety equipment.

Parachute-Style Harness

The device I prefer, and highly recommend for everyone, is a full body harness, often called a parachute-style harness. It is designed to go over the shoulders, across the chest, around the waist, and under the legs. This is, without a doubt, the best fall restraint device available for hunters. These devices distribute

the gravity forces over the thighs, pelvis, waist, chest, and shoulders. It provides a cushioned fall, even in the most severe falls, leaving the hunter in an upright position and with minimum potential for injury. The price for one of these devices can run upwards of \$50 to \$100. Again, it is more prudent to spend the money for one of these devices versus experiencing a permanent, disabling injury or death.

Harness Selection

No matter how much emphasis is placed on training hunters in fall protection, if their equipment is expensive, ill fitting, uncomfortable, or hard to put on, they aren't very likely to wear it. Before purchasing safety harnesses, hunters should carefully compare every model's features and design with an eye toward safety, as well as ease of use, and not be so concerned with the cost.

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Even with the growing popularity of tree stands, the majority of hunters still prefer keeping both feet on the ground.

Color Matters

in the Woods

by Carol A. Heiser
illustrations by Spike Knuth

Take a look at some beautiful photos of the world's animals in a popular natural history magazine, and you will see a colorful array of fur, feathers, scales, and other body coverings. One caterpillar is bright green with orange spots; a fish is mottled with pink and gold; a songbird flashes shades of iridescent blues. At the other end of the spectrum, some animals appear downright bland, awash in muted tans and browns, with maybe a few dark spots or streaks for accent. What advantages might color variations have?

Color can play an important role in courtship, protection, warning, and identification. In some instances color

is a form of communication, a way of broadcasting an animal's status for all to see. In others, color conceals the animal from view. Variation in color is an important adaptation that promotes the survival of many species.

Vanishing Acts

The palette we are probably most familiar with are the browns, greens, and golds of camouflage. Blending in with the environment can be critical for some daytime predators to remain undetected, such as a bobcat in the woods or a praying mantis on a leaf. Other predators that hunt at night need camouflage to protect them during the day while they sleep. A screech owl hides well within a large knothole or next to a tree trunk, and it can erect its ear tufts to make its outline more vertical and, therefore, less noticeable. Many snakes are nighttime hunters as well, and these tend to have some combination of dull brown, rust, or black in their pattern to help them "vanish" among dead leaves and underbrush while resting during the day.

Animals that feed, nest, or rest on the ground usually blend well to avoid predation, such as a wood thrush on the forest floor, a whitetail fawn along an edge, a fence lizard on a wood pile, or a bobwhite in a field of pale-colored grasses. These species use a type of camouflage known as disruptive coloration. Their cryptic body coverings have backgrounds disrupted by spots, streaks, or blotches of complimentary colors which mimic the effect of mottled light or the patterns of vegetation and other materials around them.

The natural colors, patterns, and behavior of an American bittern (*Botaurus lentiginosus*) help it to blend into its marsh habitat. This camouflage helps to protect it from predators while it searches for a meal of small minnows and crustaceans.





Shadows, Shapes, and Behavior

To compensate for shadows that might be a dead giveaway, many animals tend to be a lighter color on the underside than on the upper. Whereas a dark shadow underneath might provide too much contrast that reveals the animal's presence, a light colored belly may provide enough counter-shading to reflect light and, therefore, minimize or eliminate the shadow.

A fish's body also tends to be two-toned, an adaptation that fits the dappled lighting and the backdrop of green and olive that are typical of an underwater scene. The dark upper body of a fish helps camouflage it from an overhead predator like an osprey, which must look down through the dark glare of the water's surface. A predator in the water, on the other hand, which must look up and around into the bright, white light that filters through the water, has a harder time seeing the light color of the fish's belly.

Some animals literally pick up bits and pieces of the materials around them and attach them to their body to match their environment. A caddisfly larva constructs an elaborate case around its body using tiny pebbles and sticks from the stream substrate. Some crabs construct "costumes," by attaching fragments of algae or seaweed to their shell.

In addition to mirroring the surrounding color, the shape of an animal can be an adapta-

Above: With its rough, scaly appearance and wood-like colors, the eastern fence lizard (*Sceloporus undulatus*) blends in perfectly with its natural surroundings of stumps, trees, and, as its name denotes, old wooden fences. Right: The viceroy butterfly (*Limenitis archippus*) above resembles a monarch butterfly (*Danaus plexippus*), which is distasteful to predators.

tion that improves the odds of it blending with some other aspect of the environment. Common examples include a brown walking stick on a branch, a brown treehopper that looks like a thorn, the wings of a green katydid on green leaves, or a caterpillar that looks like a bird dropping. This type of camouflage is known as mimicry.

Various behaviors can enhance the camouflage, such as the bittern's habit of holding its neck and bill straight up in the air when disturbed, extending its streaks of rust and green vertically while swaying its body. Together, the coloration and the movements help the bird blend exceptionally well with the thin, tall rushes and grasses that stir in the breeze around it.

Blending in is not the intention of this spicebush swallowtail caterpillar (*Papilio troilus*). Instead, it's unique coloring and design mimic a large, false eye which helps to protect its less prominent eyes and head from being attacked by predators.

Looking Dangerous

Of course, not all animal coloration is obscure or so easily concealed. Species which smell bad, taste bad, or are harmful in some other way tend to employ scare tactics that rely in part on vivid shades or prominent patterns to warn off or divert potential predators. Nature's design here is to make the animal look dangerous or inedible, with black and yellow or red and orange featured prominently in the scheme. Birds are forewarned by orange or yellow colored insects like milkweed beetles or the caterpillars of milkweed tussock moths that these will have a bitter taste. Black and yellow bees and wasps, and the black and red velvet ant (which is actually a wasp), warn of their hazardous sting. A skunk's stripes and a stink bug's angular markings say, "keep away."

Some harmless species mimic the warning coloration of a harmful species, such as the red salamander which looks like the young of a poisonous red-spotted newt, or the hoverfly which looks like a wasp, or the viceroy butterfly,



an impersonator of the monarch. Monarch caterpillars feed only on milkweed plants which contain a chemical called a cardiac glycoside, a heart stimulant. The chemical accumulates in the insect's body but does not harm it, even after it metamorphoses into an adult butterfly. When a bird or mammal eats the butterfly, the chemical in its body causes the predator to vomit. The unpleasant experience presumably teaches the predator not to feed on similar looking individuals in the future.

In this way the colorful strategy conveys indirect protection to both the monarch and the viceroy.

Scare Tactics

Coloration can be even more effective when used in combination with other defensive mechanisms.

For example, the hognose snake has a strikingly variable coloration that may include yellow, brown, orange, or red. If the pattern does not camouflage it on the forest floor or provoke alarm when it's on a lighter colored background, the snake performs a startling act that feigns death: it flattens out its head and neck, puffs up its body, hisses, and then rolls onto its back with its mouth agape.

Large eyespots or bright flashes of color may also be enough to frighten or confuse a predator, causing it to strike at the wrong part of the body. A swallowtail caterpillar is marked with large, false eyes to call attention away from the true, less prominent eyes and head. The polyphemus moth and the buckeye butterfly both employ conspicuous

eyespots on their hind wings as a diversion away from the head and vital organs. When at rest, the wings are folded out of view, but when disturbed they are flashed outwards. It is believed that a bird or a lizard is distracted to strike at the spots rather than at the body, which buys the butterfly or moth precious time to escape. A young, five-lined skink relies on its blue tail as a lure to get itself out of trouble in the same way. The tail has an additional advantage of being able to break off, which can distract a predator long enough for the skink to run away.

Above: The body shape and color of the locust treehopper (*Thelia bimaculata*) look like a thorn on a tree, while (below) the bright green color and smooth skin of a green treefrog (*Hyla cinerea*) make it almost indistinguishable from its natural surroundings.



In still other species, bright colors serve not to warn but to attract a mate or to act as a lure that draws predators away from a nest or young. Several birds fall in this category, such as male cardinals, blue grosbeaks, scarlet tanagers, and Baltimore orioles. The females of these are either a pale brown color or a washed out green to match the leaves of the tree canopy where they nest and feed. The males sing and display away from the nest.

Did You Know?

Color itself may not really be what it seems. In some bird species, the feathers do not actually contain the pigment of the color we see but instead refract light into those colors. For example, a male hummingbird's throat appears black in poor lighting, but in bright sunlight it is brilliant red. A bluebird seems blue to our eyes when flying about in broad daylight, but if we were to peer into its nest inside a tree or a box without the benefit of direct light, its color would appear dark gray. A horse fly's eyes are striped with a rainbow of hues, caused not by pigment but by structures in the lenses that act as prisms.

Learning More

Animal Planet—special topics and an online reference of animals “from A to Zoo,” at www.animal.discovery.com

Teachers.Net—simple lesson plans, curricula, web tools, and links at www.teachers.net

Yak's Corner—a news-magazine for kids, with craft

ideas and facts about animals, at <http://216.247.63.129/yakfront.htm>

Online Field Guides—detailed species descriptions of plants and animals, and a link to Ask an Expert about various wildlife topics, at www.enature.com/guides/select_group.asp

Carol A. Heiser is a Wildlife Habitat Education Coordinator with the Virginia Department of Game and Inland Fisheries.

Like many other birds, the bright colors of the black-throated blue warbler (*Dendrocia caerulescens*) do not help to camouflage it, instead, color helps it to attract a mate and to lure predators away from a nest of young.





Along with selecting a well-built tree stand and the right tree, having a good safety harness can make hunting from up above a safer experience. ©Jennifer Worrell

continued from page 16

Most people would expect a harness to meet specific standards; but surprisingly, some brands don't meet even basic safety standards, especially commercially manufactured harnesses designed for hunters. If they meet OSHA standards then they would be acceptable for hunting. Before purchasing fall protection devices ask these questions, and ask for written proof from the manufacturers. Some things to look for in purchasing a safety harness should include:

What company manufactured the harness?

Does the harness meet any recognized safety standard for quality assurance in design, development, production, and service?

Does the manufacturer participate in any recognized third party testing program?

Does the manufacturer have qualified engineers designing and testing the harnesses?

What size should I buy?

Will it fit properly over heavy hunting clothes? (Some harnesses have a minimum adjustment on the chest

strap that cannot be properly adjusted for the clothing.)

Does the harness have strong, not overly complicated buckles, hardware, stitches, and straps? (Never buy devices with Velcro closures. They lose their stick when they get dirty.)

Do the leg straps fit firmly under the buttocks and around the thighs to evenly distribute the weight?

Donning the Harness

Because harness styles vary from one manufacturer to the other, always refer to the instructions enclosed with the device.

Generally, however, you should follow these guidelines:

1. Hold the harness by the back strap; shake the harness to allow all straps to fall in place.

2. If chest, leg, and / or waist straps are buckled, release the straps and unbuckle them.

3. Slip the straps over the shoulders so the D-ring is located in the middle of the back between the shoulders.

4. Pull the leg straps between the legs and connect to the opposite end. If using a belted harness, connect the waist strap after the leg straps. The waist strap should be tight, but not binding.

5. Connect the chest strap and position in the mid-chest area. Tighten to keep the shoulder straps taut.

6. After all the straps have been buckled, tighten all buckles so the harness fits snugly but allows full range of movement.

Inspection, Care, and Maintenance

To ensure a harness will perform the ultimate function it is intended for—saving your life—it must be inspected prior to every use. Remember too, that all harnesses have a limited life expectancy. However, the length of wearable life will vary greatly, depending on the amount of wear it receives and in what type of environment it is worn. A harness worn only a few times each hunting season will have a much longer life than one worn every day. But one worn frequently during snow and rain may deteriorate rapidly.

To maintain their service life and ensure performance, all safety harnesses should be visually inspected before each use.

The inspection should include:

1. Bend the webbing in an inverted "U" and inspect the surface for cuts, abrasions, stretching, mold or other signs of damage.

2. Examine the D-rings and snaps for distortion, cracks, breaks, and sharp or rough edges.

3. Give special attention to any attaching buckles for unusual wear, fray or cut fibers, or distortion of the hardware.

Tree Stand Incidents July 1, 2001–February 4, 2002

The Virginia Department of Game and Inland Fisheries tracks hunting-related incidents in conjunction with the license year, which is July 1 through June 30

7/1/2001- 6/30/2002	7/1/2000- 6/30/2001
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Total number of hunting-related incidents:	70	62
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Total number of tree stand incidents:	14 (out of those 70)	12
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Total number of tree stand fatalities:	2	0
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4. The tongue and grommets receive heavy wear from repeated buckling and unbuckling and should be inspected for loose, distorted, or broken grommets.

5. Friction and mating buckles should be checked for distortion, wear, and sharp edges. The outer bars and center bars must be straight. Pay special attention to corners and attachment points of the center bar.

6. Before storing a safety harness for an extended period, be sure that it is completely dry and free of surface dirt. Do not store in heated areas or in sunlight.

It's Your Choice

In virtually every hunting magazine there are advertisements for the latest in gear and equipment, including safety harnesses. When you are reading their ads don't be fooled by the slick paper, the promises of big bucks, and easy shots. There are well made harnesses and there are some that place you at extreme risk. Remember that you use the safety harnesses at your own risk, not the manufacturers. Use this information to make wise choices on the safety harness you purchase.

Just because some safety harnesses appear to be suitable for hunting and are inexpensive doesn't mean they will function when that critical moment occurs; they could easily fail. Most hunters do not hesitate to pay hundreds of dollars each year on their firearms, bows, and related equipment. But will they spend a lot of money on a well-designed and constructed fall restraint system? The choice is yours; a long hospital stay costing thousands of dollars, pain, and months of recuperation, or \$100 for a good safety harness? □

Richard L. Holdcraft, BA, MS, CHCM, PM, has been a practicing safety and health professional for the past 22 of his 37 years in the federal government. He was a Master Instructor while in the U. S. Army and has been an adjunct instructor.

Breakdown of Last Year's Tree Stand Incidents by County

Accomack-Hunter fell asleep in his stand without having his harness on and fell 12 feet resulting in broken left wrist and neck pain.

Botetourt-Hunter was climbing the tree and his harness strap broke. He fell 8 feet resulting in a compound fracture of his right ankle.

Buckingham-A support for the tree stand platform came loose causing the hunter to fall 11 feet 8 inches resulting in his death due to a broken neck. He was not wearing a safety belt.

Carroll-Hunter was using a homemade climbing tree stand. He dropped the bolt from his gun and was climbing down to retrieve the bolt when the stand broke. He was not wearing a safety belt.

Dickenson-Hunter was climbing a tree stand when a bolt broke. He fell 20 feet bruising his back and ribs. Not wearing a safety harness.

Essex-Hunter fell 19 feet from his tree stand resulting in his death due to a broken neck. He was not wearing a safety harness.

Fauquier-Hunter had finished hanging a tree stand and slipped when he stepped onto a homemade ladder. He fell 12 feet causing a fracture to his vertebra and suffered head and chest injuries. No safety harness.

Madison-Hunter fell asleep while in a tree stand and fell 18 feet causing injuries to his left ankle, left shin, and left hip. He had a safety belt with him but was not wearing it.

Orange-Hunter was using a permanent tree stand. He stepped on the end of a board and it broke loose. He fell 12 feet receiving six broken ribs and a punctured lung. He was not wearing a safety belt.



Orange-Hunter fell approximately 25 to 30 feet from a tree stand causing severe head, facial, and eye injuries. He was not wearing a safety harness.

Pulaski-Hunter was preparing to leave the stand and leaned back on the safety belt. The safety belt failed causing him to fall 17 feet. He suffered multiple fractures to both legs.

Scott-Hunter started climbing into a permanent tree stand; when he got to the top step it broke and he fell 17 feet. He broke both wrists, left arm, and three ribs on his right side. He was not wearing a safety harness.

Washington-Hunter fell asleep while hunting from a tree stand and fell 25 feet. He received broken ribs, punctured lungs, and a broken pelvis. He was not wearing a harness.

Washington-Hunter fell asleep in the tree stand and fell 14 feet, receiving broken ribs on his right side, broken pelvis, and a broken vertebra. He was not wearing a harness.

Note: On Department-owned lands, National Forests, and on Department of Conservation and Recreation-owned or controlled lands, the use of a safety harness while hunting from tree stands is strongly recommended.



Fall Arrest System Suppliers

DbiSALA

3965 Pepin Avenue
Red Wing, Minnesota 55066-1837
Phone: 651-388-8282
Toll Free: 800-328-6146
Fax: 651-388-5065
E-mail: solutions@dbisala.com
www.dbisala.com

Dynamic Scientific Controls
306 Country Club Drive
Wilmington, DE 19803-2920
Phone: 302-571-8470
Fax: 302-571-0756
Phone Toll Free 800-372-7775
E-mail: dsc@fallsafety.com
www.fallsafety.com

Elk River, Inc.

Cullman, AL
Customer Service Department by phone at
1-800-633-3954 or
E-mail: sales@elkriver.com
www.elkriver.com

Evan Corp.

8 Reise Road
Jamestown, RI 02835
info@evancorp.com
Phone: 401-423-2230
Fax 401-423-2785
www.evancorporation.com

Fall Protection Systems, Inc.

4013 Waneway Court
Florissant, MO 63034
Toll-Free: 1-800-972-0400
Phone: 314-921-8071
<http://www.fallprotectionsystems.com>

Fall Protection Systems U.S. LLC

93 Second Ave
Trenton, NJ 08619
Phone: 800 452-0222
Fax: 609 584-8882
www.fall-protection-us.com

Miller - Dalloz

fall/fall.htm
Dalloz Fall Protection
1355 15th Street
Franklin, PA 16323-0271
www.bacou-dalloz.com/us/

Protecta USA

7707 Pinemont Drive
Houston, Texas 77040
Phone : 713- 460-2442
Fax : 713-460-1990
Toll-Free : 800-856-2442
E-mail: pro-info@protecta.com
www.protectausa.com/osha_links.html

**Rose Company Headquarters:
(MSA Subsidiary)**

2250 S. Tejon St.
Englewood, Co 80110
Rose Customer Support:
1-888-421-8324
www.rosemfg.com

Sellstrom Manufacturing, Inc.

One Sellstrom Drive
Palatine, IL 60067
Toll-Free: 800-323-7402
Phone 847-358-2000
Fax 847-358-8564
www.fallprotection.com

Tritech Fall Protection Systems

Head Office: 3610 Manchester Road S.E.,
Calgary, AB Canada T2G 3Z5
Toll Free: 877-287-0808
Phone: (403) 287-1499
Fax: (403) 287-0818
E-mail: info@tritechfallprotection.com
www.tritechfallprotection.com

A Presci

**Hunting from
a tree stand might
just be the most
dangerous
part of your next
outdoor experience.**

It has been my privilege and good fortune to hunt in some 12 different countries on five different continents. When talking hunting, I have been asked what is the most dangerous thing I have done in hunting. I am asked, has it been following a wounded cape buffalo into the tall grass, or facing an elephant charge, or being in a blind in the pitch dark with a lion some 5 feet away sniffing at the intruders? Although I have had occasion to experience all of those things, without a doubt the most dangerous thing I have done in hunting is something many Virginians do each fall—climb into a tree stand.

My own personal tree stand accident came on a hot summer day in July 1993. I decided I had an hour or so free and was going to work on one of my tree stands. I had always worn a safety belt, as I did on this occasion. I got up in the stand and did my work, unfastened my safety belt, and headed down. It was then that one of my tree steps, which had been in the tree for two years, pulled out. I tried to grab tree steps on the way down but only managed to rupture half of the triceps muscle in my left arm and sustained multiple bruises to both arms. When I hit the ground I knew I was in trouble and knew



©Dwight Dyke

Option You Can Live With

by Dr. William C. MacCarty, III

my back was injured severely. Fortunately, I could feel everything and could still move my feet. It was not until I pulled myself to the stand and tried to walk that I realized my right foot was going east-west when I was going north-south. I was able to wedge the foot on a root and reduce what was a dislocation of my right ankle. I also suffered a burst fracture of my first lumbar vertebrae. Fortunately, I was able to get out to my truck and call for help on my cell phone and managed, with difficulty, to drive to where I could be picked up by the rescue squad. I spent two days in ICU and 10 days in the hospital, two months in a plastic body jacket; one month in a corset, and was out of work for three months. I was one of the lucky ones!

A local physical therapist was sitting on a chair on the platform stand without a safety belt and inadvertently touched off both barrels of his double barrel shotgun when he shot a deer. This act launched him from the stand, and he sustained severe fractures to the ankles, knees, and his back. He required some six to eight hours of surgery on his back and multiple surgeries on all four injured joints. He now walks with difficulty and doesn't hunt any more.

As a practicing orthopedic surgeon, I personally have taken care of seven broken backs (including my own), three broken ankles, and half a dozen broken wrists from tree stand accidents. Several of those fractures were compound (through the skin). One of the compound fractures was to an ankle, sustained by one of our nurses' husband. He was two miles from his truck. Nobody

knew he was there. It took him some four hours to crawl in the cold, damp rain to get to his truck and five hours before he got to me for definitive care. Two operations later he is functional and back hunting again.

After my accident in 1993, I looked harder at tree stands and tree stand accidents. The facts available, then published in *Deer and Deer Hunting* in 1993, are really quite frightening. One out of three hunters who use tree stands will suffered a fall. Out of all the falls from

tree stands, 13 percent resulted in major disability. That is not to mention the ones that died. If you look at the timing of falls in tree stand hunting you can find that they are fairly evenly split. People fall ascending, climbing into the stand, while on the stand, climbing out of the stand, and descending.

There are, however, some things that hunters can do to make tree-stand hunting safer. The first of these is to make sure that they are hunting from a safe stand. Climbing stands need to be sturdy, well constructed, and rated for at least the weight of the hunter using them. For myself, I prefer stands that are relatively simple. I think the more complicated the gadgets and adjustments, the easier it is for one of those things to malfunction. Hang-on stands must, likewise, be sturdy, well constructed, and rated for the necessary weight. Climbing sticks, blocks, or ladders now available should be made of good material. Skimping on paying for good tree steps, ladders, and stands is asking for trouble. Likewise, permanent stands need to be well constructed and inspected annually. Permanent stands change with the wind and tree growth. Nails and screws tend to sink in and become loose, rendering stands unsafe after as little as a season or two, depending on the tree and the weather.

Another thing of extreme importance in tree stand safety is the use of satisfactory, fall-restraint gear. When they first came out, the only fall restraint available was a safety belt. Military studies have shown the full safety harness is by far the



©Dwight Dyke

Hunting from a tree stand not only requires good equipment, but good common sense. Without the two you could find yourself hurt or even killed.

safest arrangement for a fall restraint. Again, the statistics are frightening. When a person hangs from a safety belt, he/she will lose consciousness in an average of five minutes from pressure on the chest and a lack of oxygen. The shoulder harness improves this a little, to about 10 minutes, but doesn't solve the problem. When it comes to selecting a safety harness the safest recommendation is to use a full body harness.

This brings up another point in using any fall restraint. The restraint should be adjusted so that even in the event of a fall from a stand the hunter can readily reach the stand itself or similar support so that he/she does not suffer the inevitability of unconsciousness from hanging.

It is also advisable to use a haul rope for bows, rifles, and other equipment rather than climbing with them slung across the hunter's back. I am reminded of a North Carolina hunter, the brother of one of my hunting buddies, who fell from a stand with his rifle across his back. The thoracic vertebral fracture that he sustained rendered him a paraplegic and was believed to be due to his falling directly on the rifle.

A further thing that is important when we are hunting at any time, but particularly from a tree stand, is to make sure a friend or spouse knows when and where you are hunting so that someone may know when to look for you in the event of an accident. In my own case, my wife and kids were at the beach, and no one knew I was up working on my tree stand that hot July day. Had I not been able to extricate myself, in spite of the injuries, there is no question that I would have ultimately succumbed in that 100 degree heat.

In this day of modern conveniences, there is one other safety item worthy of consideration. It is my

opinion that everybody should consider carrying a cell phone as some means to contact help should an accident occur. In my own case, I did have a cell phone in my truck and was able to call for help as soon as I got to the truck. Had I been more prepared, I would have been able to call from the scene of the accident.

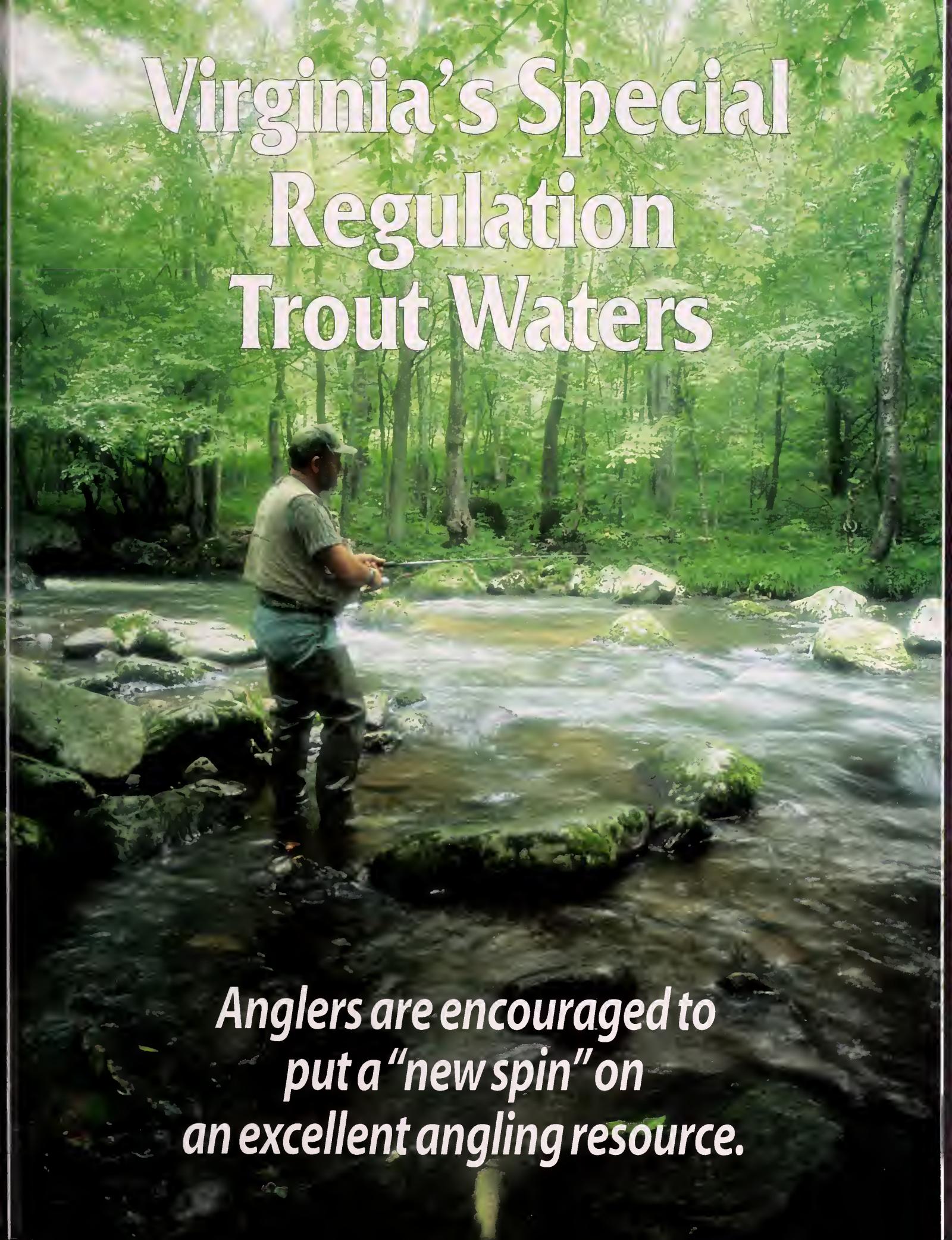
I count myself one of the lucky ones. I have essentially fully recovered and have enjoyed more hunt-

ing trips since my recovery. Yes, I still hunt from tree stands, although with much more care and caution than I once did. I think it is good to remember that even though you play it safe, it is still the most dangerous thing you will do in hunting. □

William C. MacCarty, III M.D. is a orthopedic surgeon from South Boston, a hunter education instructor, and tree stand accident survivor.



Keeping safety in mind will always ensure a successful outdoor experience.

A photograph of a man fly-fishing in a river. He is standing in the water, wearing a green t-shirt, dark pants, and a cap, facing away from the camera towards the river. The river flows rapidly over rocks and mossy boulders. The background is a dense forest of green trees.

Virginia's Special Regulation Trout Waters

*Anglers are encouraged to
put a "new spin" on
an excellent angling resource.*



by Jonathan Stamper
and George Palmer

Discovering a special regulation trout stream can generate very different responses from Virginia trout anglers. Fly-fishermen, anticipating the relative solitude and the quality trout populations that thrive in special regulation areas, are overjoyed. However, arriving at the same body of water and reading the conspicuous signs that prohibit the use of anything other than "Single Point Hook, Artificial Lures" could cause some anglers who favor conventional spinning tackle to leave in disgust. They may feel or believe that the Virginia Department of Game and Inland Fisheries has unfairly discriminated against them and have restricted the area for the exclusive use of fly-fishers.

However, regulations requiring the use of single point hook, artificial lures by no means forbid the use of conventional spinning tackle. Spin-fishermen can, and are welcome to enjoy the benefits of special regulation streams. In fact, by borrowing a few tactics commonly used to catch bass and panfish, spinning tackle

can be extraordinarily effective on special regulation trout streams.

First of all, trout anglers must broaden their definition of a "trout lure." It seems that the vast majority of Virginia trout fishermen would never consider using any artificial lure other than an in-line spinner in their pursuit of trout. While Panther Martins, Rooster Tails, and other spinners are an effective staple of trout fishing, they may not be the best choice for use in special regulation areas. In these waters, they must be outfitted with a single point hook. Although they draw no shortage of strikes from trout that swim in special regulation streams, without treble hooks a spinner's ability to hook a fish that strikes is severely reduced. Spinners with single point hooks are a viable option for fishing special regulation streams, if the angler is willing to be patient and deal with a somewhat larger proportion of missed strikes.

This hamstringing of the only real "trout lure" in the Virginia trout fisherman's arsenal may actually serve as a great help to anglers interested in plying special regulation waters with spinning tackle because it forces them to consider other lure options. Specifically, jigs used by anglers attempting to catch sunfish, and soft-plastic minnow baits, commonly found in the smallmouth bass fisherman's tackle box. Both can be astonishingly effective for trout.

In fact, one would be hard-pressed to find a more effective lure for catching large numbers of trout in any Virginia stream than a small jig dressed with a tuft of feathers or a small plastic trailer. Small feather jigs often referred to as "duck flies," and marabou jigs are very popular among crappie and bluegill fishermen and are dynamite trout lures. They are available in a rainbow of colors ranging from bright neon colors, effective in stained water, to drab earth tones like browns and greens that nab trout in normal water conditions.

Even more versatile are jigheads outfitted with a variety of soft-plas-

tic bodies. Options range from small tubes that imitate nothing in particular to precise replications of trout food items like aquatic insects or crawfish.

Tubes, small squid-like cylinders of plastic with numerous tentacles at one end, are, like feather jigs, popular among crappie and panfish anglers but are also highly effective for trout. Mated with a $1/64$ to $1/16$ -ounce jighead, tubes can be manipulated by the angler to imitate almost anything a trout might eat, from a mayfly nymph to a minnow. One to 2-inch tubes are widely available and very inexpensive, allowing anglers to stock up on a variety of colors with which to experiment.

Many other soft-plastic jig trailers also fool Virginia trout. Representations of insects or crayfish work especially well. The "Trout Magnet," a small split-tail grub on a darter jig head is (as its name suggests) also a great trout lure. Curly-tail grubs in various sizes catch everything from bluegill to striped bass, and the 1 to 2-inch versions have bagged more than a few Virginia trout.

With any of these jigs, the particular body of water you fish should dictate the size of the lure you choose. Generally, $1/64$ to $1/32$ -ounce jigs are best for small streams, while $1/16$ or even $1/8$ -ounce heads are needed for large streams with very fast or deep water. In most situations, use the lightest jighead conditions allow.

One key to the effectiveness of jigs as trout lures is the great variety of ways that they can be presented. When fish are relatively aggressive, a downstream presentation can be deadly. Simply make a quartering-downstream cast, and allow the jig to sink slightly and then swing down below you in the current. Work the lure back upstream with sporadic jerks and twitches of the rod tip, punctuated by occasional pauses.

Using spinning tackle with a single point hook, artificial lure, and a little luck is all it takes to land a limit of tasty fish in Virginia's special regulation trout waters.

At the opposite end of the spectrum, jigs can also be a lure to toss when trout are not feeding aggressively. In this situation, an upstream presentation is most effective. Being careful not to use a jighead too heavy for the particular stream, cast upstream above a likely holding area and try to reel up slack line at the same speed that the current is moving. Occasional jerks of the rod tip help maintain contact with the lure, as well as providing the jig with a little motion. Sometimes the fish seem to prefer a lure that is rhythmically hopping down the stream bottom, while at other times stubborn trout refuse all but a dead drift. This method requires considerable practice and patience, but often pays off by drawing strikes when no other presentations will.

While jigs are hard to beat for catching large numbers of trout, Virginia anglers can drastically increase their chances of tangling with trophy trout by plying special-regulation trout streams with soft-plastic lures intended for bass fishing. Soft-plastic, minnow-imitating jerkbaits appeal to large trout for the same reason bass attack them; they have a lifelike subtle action and imitate a substantial meal.

While even large trout have much smaller mouths than adult bass, trophy browns and rainbows will readily strike these moderate-sized bass lures. Three to 4-inch versions of the Fin-S-Fish, Sluggo, Berkley Bass Minnow, Bass Assassin, and Yamamoto Senko are all very effective, and any of these soft-plastics can be fished with the methods previously described for jigs. These jerkbaits work well when fished weightless, but a few split-shot can be crimped on the line or nail weights can be inserted into the lure for added casting distance or to get the lure into deeper water. Soft-plastic minnows should be rigged on a size 2-6 long shank hook, or can be rigged Texas-style on a small, light-wire worm hook.

Fishing special regulation streams does not require sophisticated tackle. A 5 to 7-foot light or ultra-light spinning rod works fine. Trout can strike lightly, and a sensitive rod with a soft tip is often needed to feel subtle strikes, but a slightly stiffer rod with a little more backbone helps to ensure solid hooksets on hefty browns and rainbows. Select a reel that balances well with your chosen rod, and fill it with a limp 4-6 pound test monofilament. Many an-

glers prefer clear or green low-visibility lines that help to avoid spooking wary trout.

Finally, remember that you don't have to spend a fortune to get out and enjoy these special regulation trout waters. Most anglers already have the required gear to be effective. Anglers should be aware that these areas have special regulations because fisheries managers want these streams to provide excellent trout fishing opportunities with the potential of producing trophy size trout. Restrictive regulations often allow quality fish to be caught over and over again. Keep in mind that these fish are recycled, being caught again by you and other anglers. So, treat them with care when handling and releasing them, and always be mindful of other anglers. While individual methods vary, most anglers who use special regulation trout waters do have several commonalities. They enjoy fishing, catching fish, and seeing and experiencing the beauty of Virginia's special regulation trout streams. □

George Palmer is a District Fisheries Biologist with VDGIF in Southwest Virginia. Jonathan Stamper is a Fisheries Technician with VDGIF in Southwest Virginia. Both are based out of the Marion Regional Office.





Journal

VDGIF 2002 Calendar of Events

September 7: *Women in the Outdoors*, Izaak Walton League, Centreville, Va. For information, contact Linda Layser at (703) 425-6665 or rglayser@msn.com.

September 13-15: *Wilderness Survival Weekend*, Lake Robertson, Lexington, Va. For information call (804) 367-6351.

September 21: *Virginia Outdoors Day*, Belle Isle State Park, Warsaw, Va. For information call (804) 367-6351. □

October 18-20: *Virginia Outdoors Weekend*, Westmoreland State Park. For information call (804) 367-6351.

December 13-14: *Women's Deer Hunt*, York River State Park. For information call (804) 367-6351. □

Hunters "Get HIP" It's the Law.

All migratory bird hunters must be certified through the Harvest Information Program (HIP) before they can legally hunt any kind of migratory birds in the United States. If you hunt migratory birds without being certified you can be ticketed and fined. Hunter participation in this program is critical for conservation of migratory bird resources and protection of the hunting heritage. To register, hunters can call 1-800-938-5263 or use the Department's Web site to register on-line at [www.dgf.state.va.us](http://www.dgif.state.va.us). □



Book Reviews

A Guide to Common Freshwater Invertebrates of North America
by J. Reese Voshell, Jr.
illustrated by Amy Bartlett Wright
Hardcover, 454 pages, with 102 color plates and 35 b/w illustrations, \$29.95, plus \$5.00 shipping

This substantive, yet very accessible guidebook describes nearly 100 of the most common groups of invertebrates found in the inland waters of North America, and provides background on the biology and ecology of the invertebrate groups. In addition, this guide explains how freshwater invertebrates can be studied simply and without complex equipment. Written in non-technical language and illustrated with over 100 original plates, this guide will be a valuable resource to amateur and professional naturalists, environmentalists, teachers, anglers, and others interested in aquatic biology.

To purchase *A Guide to Common Freshwater Invertebrates of North America*, contact McDonald &

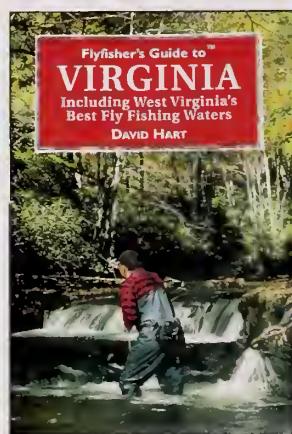
Woodward Publishing Company, 431-B East College Street, Granville, OH 43023 or call 1-800-233-8787.

Flyfisher's Guide to Virginia™—Including West Virginia's Best Fly Fishing Waters

by David Hart, 2002, Wilderness Adventures Press, softcover, 540 pages, 50+ maps, photos, \$28.95.

reviewed by King Montgomery

David Hart, a frequent contributor to *Virginia Wildlife*—ably assisted by fly shop owners, guides, and outfitters—has compiled a comprehensive guidebook on fly fishing in the Old Dominion and the Mountaineer State. Put simply: if you want to go fly angling somewhere in the Virginias, you need this book to show how to get there, where to stay and eat, which guides to use, where to launch your boat or canoe, and the location of the nearest fly shop, plus a lot more. It will tell where to fish and which flies to use. The book does everything for you except net your fish.



The guide has over 50 stream/river maps, and a number of photographs, some of which I had the pleasure of taking. This softcover 6 X 9 inch book has an easy-open, lay-flat binding that is most useful. The book is not merely a guide. David uses his easy-reading writing style to advantage and interjects humor along the way. It is fun to read as well as being very informative. Non-fly anglers can use the information in this fine tome on the wonderful fishing to be found in the two Virginias.

Contact Wilderness Adventures Press at 1-800-925-3339 or on the Web at www.wildadv.com for more information and to order this and other great outdoor books. Or you can order an autographed copy directly from David Hart by sending a check for \$34.95 (includes tax & shipping) to 6150 Ridgemont Drive, Centreville, VA 20120. □



Close Encounters

by Jennifer Worrell

Bedford County Game Warden Steve Pike seems to wear some sort of invisible owl attractant, which mysteriously draws these "birds of the night" to him. The first event occurred when Pike received a call from three ladies renting a house that there was an owl in their fireplace. They felt the bird was injured, and they requested Pike's assistance. The warden complied, put on his gloves, and rescued the subdued animal from the fireplace. He placed the owl in a box to transport it to a wildlife rehabilitation center. Once in the truck, the feathered creature miraculously came to life. The owl pushed through the box top like a jack-in-the-box and proceeded to

flap furiously around the patrol car. Pike frantically rolled the windows down as the bird careened over the front seat, pounding his head with its wings. Finally, the owl flew across his lap and with a blink of an eye was out the window.

The owl saga continued some months later. Pike received a call late one night that a man had hit an owl with his car. The bird was alive, but it wouldn't move. The warden left his warm home and drove all the way to the other side of Bedford County to rescue the owl. When Pike reached the site he saw the bird sitting about 15 yards in front of the car. As the warden approached the owl and attempted to capture it, the bird looked him straight in the eye and suddenly flew away, unhurt. Perhaps it was the same owl as before, or a mysterious owl network "hoo" is familiar with game wardens. One will never know.... □

Tenth Annual Eastern Shore Birding Festival October 4-6, 2002

Virginia's Eastern Shore is one of the most important staging areas along the East Coast for thousands of migrating neotropical songbirds and raptors, as they migrate south for the winter. The unique location of the Eastern Shore not only attracts birds this time of year, but hundreds of people who enjoy watching our feathered friends and spending time in the outdoors.

The Eastern Shore Birding Festival will be held at the Best Western Sunset Beach Resort on the southern tip of Virginia's Eastern Shore, just across the street from the Eastern Shore of Virginia National Wildlife Refuge. The three-day weekend event will include guided wildlife and birding tours, boating adventures, butterfly walks, exciting exhibits, hands-on demonstrations, and a newly expanded children's exhibit.

Don't forget to mark your calendar for October 4, 5, and 6. Bring a

friend or the whole family for some great outdoor fun. For more information and how to register for special events, call the Eastern Shore of Virginia Chamber of Commerce at (757) 787-2460 or visit their Web site at www.esvachamber.org. □

Frozen in Time

by Marika Byrd



Norma and Paul Catron, of Ceres, Va., are long-time readers of *Virginia Wildlife*. Mrs. Catron skillfully captured an unusual picture while her husband was sighting in his flintlock rifle. Caught unaware, she captured the full load of black powder as it fired and smoked. Ms. Catron indicates she had to guess when to push the shutter button on the camera. Their small farm is in what was formerly known as Nebo, in Smyth County. Mr. Catron is an avid hunter, fisherman, and outdoorsman.

Pictures like this remind us that before you head out this hunting season make sure your firearms are clean, in working order, and sighted in properly before going afield. Safety is paramount at all times, no matter what you are doing. □





On The Water

by Jim Crosby, Region 4 Boater Education Coordinator

Forecasts That Rhyme

Have you heard this one?

*Red sky at morning
Sailors take warning;
Red sky at night
Sailors' delight.*

Weather proverbs have been around longer than the weather channels on your VHF-FM Marine radio. While their origins have been lost to the passage of time, their validity has not. Their survival over centuries bears witness to their general validity. Chapman's book *Pilot- ing Seamanship & Small Boat Han- dling* recommends we "use them with caution, and adapt them to local waters."

Chapman's says, "There is a simple explanation for this old and quite reliable proverb. Since weather tends to flow west to east in most places, if tomorrow's weather appears to the west as a line of wetness, the sun shining through the mass appears as a yellow or grayish orb. On the other hand, if the weather lying to the west is dry, the sun will show at its reddest."

"Red sky in the morning is caused by the rising, eastern sun lighting up the advance guard of high cirrus and cirrostratus clouds, which will be followed later on by the lowering, frontal clouds that produce rain."

*When a halo rings the moon or sun
The rain will come upon the run.*

Halos are excellent signs of rain. A halo around the moon after a pale



©Dwight Dyke

sun confirms a rain is on the way because you are viewing the moon through the ice crystals of a high cirrus cloud. When the whole sky is covered with these wispy, white cloud formations of minute ice crystals, a warm front is approaching which will bring a long, soft rain.

Let's put any confusion to rest about the forecast of rain by the appearance of sun and moon halos. The U.S. Weather Service has verified through repeated observations that sun halos will be followed by

rain about 75 percent of the time. Halos around the moon have a rain forecasting accuracy of about 65 percent.

*When boat horns sound hollow,
Rain will surely follow.*

When you notice an unusual sharpness of sounds, a more penetrating sound of a ringing bell, or voices that carry over longer distances on certain days, you can count on rain to follow. This acoustical clarity is improved by the lowering of the clouds that bring bad weather. The tonal quality of sound is improved because the cloud layer bounces it back, the way the walls of a canyon echo. When the cloud-cover lifts, part of those same sounds dissipate into space.

*Rainbow in morning
Sailors take warning;
Rainbow toward night
Sailors' delight.*

Yet another old weather jingle that has a ring of truth, this one is based on the fact that a rainbow in the west lit by the rising sun in the east predicts a storm moving in your direction. A rainbow viewed in the east by an evening sun in the west would tell you the storm has past.

You can put a little nostalgia in your boating life by remembering these ditties and rhymes to quote at appropriate moments. You could even impress your fellow sailors and maybe alert them to a pending weather change that could mean trouble in their future. □

RECIPES

by Joan Cone

Easy Brunswick Stew

Brunswick stew without squirrel is like bread minus butter. You can eat it, but something is lacking.

For dining pleasure, squirrels should be pre-cooked and meat removed from the bones. Cooked squirrel meat is firm and resembles turkey dark meat in texture and flavor.

The following recipe calls for stewing your squirrels until tender so all bones can be removed easily. If you have a pressure cooker, you can achieve the same result by using a basic recipe for stewing chicken.

Menu

Brunswick Stew

Mixed Greens with Bacon and Goat Cheese

Easy Sally Lunn
Lemon Cloud Pie

Brunswick Stew

2 squirrels, quartered
1 can (10½ ounces) condensed tomato soup or 1 cup canned stewed tomatoes
1 onion, sliced thin
3 potatoes, sliced thin
1 cup green lima beans
1 tablespoon sugar
Salt and pepper to taste
1 cup canned whole-kernel corn
4 tablespoons butter or margarine

Place squirrel pieces in deep kettle and cover with water. Simmer until tender (about 1½ hours). Remove squirrel pieces, debone the meat and cut into 1-inch pieces. Return meat to broth in kettle and add tomato soup (or stewed tomatoes), onion, potatoes, lima beans, sugar, and salt and pepper to taste. Cook

until potatoes and lima beans are tender. Add corn and butter and cook an additional 5 minutes. Serves 4.

Mixed Greens with Bacon and Goat Cheese

4 thick bacon slices, coarsely chopped
½ teaspoon Dijon mustard
1 tablespoon red wine vinegar
3 tablespoons olive oil
6 cups mixed baby greens
4 ounces soft fresh goat cheese

Sauté bacon in skillet over medium heat until brown and crisp. Using slotted spoon, transfer bacon to paper towels to drain. Whisk mustard and vinegar in large bowl to blend. Whisk in oil. Season to taste with salt and pepper.

Add greens to large bowl with dressing and toss to coat. Divide greens among 4 plates. Scatter goat cheese and bacon pieces over each salad. Serves 4.

Easy Sally Lunn

2 eggs, separated
½ cup sugar
2 cups flour, sifted
3 teaspoons baking powder
½ teaspoon salt
¾ cup milk
2 tablespoons butter, melted
¼ cup sugar

Preheat oven to 350° F. Beat egg yolks with sugar. Mix flour, baking powder and salt. Add dry ingredients to sugar mixture, alternately with milk. Add melted butter. Beat egg whites until stiff and fold into batter. Pour into a 9 x 12-inch greased pan. Sprinkle ¼ cup sugar on top. Bake 40 to 45 minutes.

Lemon Cloud Pie

1 refrigerated pie crust for 9-inch pie
1 cup sugar
3 tablespoons cornstarch
1 cup water
½ cup lemon juice
2 egg yolks, slightly beaten
4 ounces cream cheese, cubed, softened
1 teaspoon grated lemon peel
½ cup whipping cream
Topping
½ cup whipping cream, whipped

Prepare and bake pie crust as directed on package for one-crust baked shell using 9-inch pie pan. Cool 30 minutes or until completely cooled. Meanwhile, in medium saucepan, combine sugar and cornstarch and mix well. Stir in water, lemon juice, and egg yolks. Cook over medium heat until mixture boils and thickens, stirring constantly. Boil 1 minute. Add cream cheese and lemon peel and stir until cream cheese is melted and mixture is smooth. Cool to room temperature, stirring occasionally. In large bowl, beat ½ cup whipping cream until soft peaks form. Fold into cooled lemon mixture. Spoon filling evenly into cooled baked shell. Cover surface with plastic wrap and refrigerate at least 6 hours or until serving time. Just before serving, spoon or pipe whipped cream over filling. Store in refrigerator. Makes 8 servings. □



Wild Backyard

story and photos by Marlene A. Condon



Don't Clean Up That Yard

At this time of the year many homeowners feel they must begin to tidy up the yard. They accomplish this by removing flower stalks and raking up leaves, all of which are often carted off to the landfill or a local composting center. But when we clean up our yards, we destroy valuable food and habitat for wildlife. This year, make life easy on yourself and our wildlife by leaving the yard in a more natural state.

Allow your flowers to set seed, let them dry naturally, and leave them to stand throughout fall and winter. In this way insects will be able to overwinter on the stalks or leaves, and small mammals and birds will be able to find food here, whether they eat the seeds and/or the insects.



Fields left uncut in the fall can be quite attractive, and they can bring in field-nesting birds, like meadowlarks.

For example, Carolina wrens (delightful birds to have around the home because they sing year 'round) are especially dependent upon hibernating spiders and insect adults, larvae, pupae, and eggs. During harsh winter weather these little birds will perish if they can not find enough to eat, making the plants in your yard extremely critical to their survival.

While it is important to remove leaves from your lawn so that they do not smother the grass and kill it, it is of the utmost importance to allow leaves to remain on the ground beneath tree driplines (the area around the trunk that is shaded by limbs). Many species of insects and amphibians may use these leaves for protection from the cold while they hibernate.



Dried flower stalks that are tall enough to stand above the snow line are especially useful to wildlife.



More and more folks are deliberately growing plants that benefit wildlife around their houses and then leave the dried stalks standing throughout the fall and winter to feed them.

For example, people who clean up their hackberry leaves also clean up the next year's population of hackberry emperor butterflies. Gray treefrogs can often be found underneath leaf piles and many kinds of caterpillars, such as the popular woolly bears, hibernate underneath dried leaves.

You should not be ashamed to maintain your yard in a more-natural state throughout fall and winter. Instead, be proud that you are helping the creatures of our land to survive. And with the passage of time the beauty of the various shades of brown will "grow" on you. Trust me. ■



Naturally, Wild

story and illustration
by Spike Knuth



Northern Clapper Rail

Rallus longirostris

The most distinctive characteristic of the rail family is their ability to stay out of sight. However, they don't hide the fact that they are around. While secretive, the clapper rail, in particular, is a noisy bird that utters a grating "kac-kac-kac," a common summer sound along Virginia's Eastern Shore and Chesapeake Bay marshes. The "clapping" or "clicking" calls (like sticks being hit quickly together), are most often heard at dusk.

The northern clapper rail, one of eight subspecies or races, are grayish brown above with slightly more brownish and lighter underparts, with decidedly grayer cheeks and a darker cap. The long curved bill is for probing in marsh mud, and the flanks show white bars on brown, edged in black. The tail is carried cocked upward revealing a white under tail patch. The birds bob their heads and twitch their tails as they walk.

The clapper rail is a master at creeping and slipping through heavy growths of salt marsh cordgrass and other marsh vegetation as it searches for food. Only occasionally will it suddenly appear on the outside edge of a tidal creek or marsh to probe for shrimp, crabs, or snails in the mud, only to dissolve back into the maze of emergent vegetation.

The diet of the clapper rail is about 96 percent animal matter. It feeds on shrimp, snails, fiddler crabs, other mollusks and crustaceans, worms, and other aquatic insects, which they find at low tide on mud flats or along the edges of tidal creeks and marshes.

The northern clapper rail breeds from Maine to Virginia and tends to be the only migrant of all the subspecies. Most of them spend their winters from South Carolina to Florida. They

return in spring to their breeding marshes, with nesting beginning in April. Nests are depressions in the ground in a clump of grasses, lined with finer grasses and with a few plumes of tall grass arching over and concealing the nest. The female seldom goes right to her nest, preferring to land some distance away and walking up to it. This may happen so often that she'll actually mat the grass down to form a visible path.

Anywhere from five to 14 buff-colored eggs, marked with brown, are laid and incubation lasts about 18 to 22 days. The downy chicks are a shiny black. The nests are usually located just above the normal high tide line, and storms, with winds out of the northeast during high tide, will wash nests and eggs away and sometimes drown the newly hatched young. Rails will

commonly nest again if their first nest is destroyed, and many will raise two broods. All nesting is normally completed by August. While some rails may winter over, most migrate by November, and the marshes again fall silent of the clapping calls of the clapper rail.

Rail hunting was once a major event along Virginia's coasts, when sporting clubs flourished along the Barrier Islands. Hunting rails is conducted in much the same way today, with hunters timing their activities with high tides—called "marsh henning tides"—when birds are forced out of their usual cover. Working in tandem, hunters will pole boats or skiffs over the flooded marshes to flush the rails. One hunter poles while the gunner sits up front. □



Just Arrived!

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